



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/534,962

05/16/2005

Masayoshi Kondo

033036.088

1696

25461 7590 08/18/2008
SMITH, GAMBRELL & RUSSELL
SUITE 3100, PROMENADE II
1230 PEACHTREE STREET, N.E.
ATLANTA, GA 30309-3592

EXAMINER

PATEL, ISHWARBHAI B

ART UNIT

PAPER NUMBER

2841

MAIL DATE

DELIVERY MODE

08/18/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<p align="center">Advisory Action Before the Filing of an Appeal Brief</p>	Application No. 10/534,962	Applicant(s) KONDO ET AL.	
	Examiner Ishwar (I. B.) Patel	Art Unit 2841	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 05 August 2008 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
 b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
 (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
 (b) ☐ They raise the issue of new matter (see NOTE below);
 (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
 (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
 5. ☐ Applicant's reply has overcome the following rejection(s): _____.
 6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
 7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
 The status of the claim(s) is (or will be) as follows:
 Claim(s) allowed: _____.
 Claim(s) objected to: _____.
 Claim(s) rejected: 17-20.
 Claim(s) withdrawn from consideration: 1-16 and 21-32.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
 9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
 10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:
 See Continuation Sheet.
 12. ☐ Note the attached Information *Disclosure Statement*(s). (PTO/SB/08) Paper No(s). _____.
 13. ☐ Other: _____.

August 14, 2008

/Ishwar (I. B.) Patel/
Primary Examiner, Art Unit 2841

Continuation of 11. does NOT place the application in condition for allowance because:
Applicant's arguments filed on August 5, 2008 are reviewed carefully but not found to be persuasive.

Applicant argues that Shimizu discloses a wiring board wherein a bump (32) is formed for electrical connection to a land (38); see Figure 2, element 4. The electrical connection is established merely by physical contact and hence poor in reliability. In the present invention, conductor posts (105) and pads (106) are connected by a metal or an alloy so as to attain a high reliability; see Figure 1, especially Figure 1(e) to 1(g). See also [0090] of this application. This is point out in Claim 17.

This is not found to be persuasive.

Shimizu, as applied to claim 17, disclose connection of the conductor posts (32, 39), which are made of metal, to the pads (38) with an adhesive medium (7). The claim recite "said conductor posts and pads are connected by a metal or an alloy through the medium of said adhesive layer." No specific connection structure is recited in the claim. As Shimizu discloses the structure recited in the claim, Shimizu meets the limitation.

Applicant further argues that in the present invention, the surface coating is provided only in the flexible portion. As a result, conductor posts can be short to attain high connection reliability, and the resulting wiring board can be thin because the multilayer portion includes no surface coating. This benefit could not have been predicted from either of the references. Because of the absence of a surface coating on the rigid portion in the present invention, the distance between the conductor posts and the conductor pads is short so that the reliability of the connection is high and this constitutes an advantage of the present invention. Shimizu does not disclose the wiring board as a flexible board, surface coating applied to the flexible portion but no surface coating applied on a multilayer portion.

This is not found to be persuasive.

Though, Shimizu does not disclose a flexible board, as applied to the claim rejection, board with flexible portion and rigid portion, as disclosed by Dixon is old and known in the art. Further, Dixon discloses a surface coating for the protection of the flexible part which is exposed. As the portion of the board in multilayer region is not exposed, no surface coating is applied. The instant claim recites no surface coating on a multilayer layer portion / or on rigid portion (as argued), and surface coating applied to flexible portion, which is not a part of multilayer portion / rigid portion. The modified board of Shimizu (with the teaching of Dixon) discloses the structure as recited. Therefore, the modified board of Shimizu meets the limitation.

Further, replacing the middle portion of the Shimizu by a flexible board will facilitate bending of the board to be used where flexibility in operation is needed. Therefore, a person of ordinary skill in the art at the time of applicant's invention would have been motivated to replace the middle portion of Shimizu by a flexible board to have the desired flexibility of the board. .